REMARKS

This is in response to the Office Action mailed December 4, 2002. In the Office Action, Applicant's Specification was objected to for not containing a summary of the invention section. Application's Claims 1-3, 5-7, 13-14 and 23 were rejected as anticipated by U.S. Pat. No. 5,647,058 ("Agrawal"). Applicant's Claims 4, 8-12 and 15 were rejected as obvious in view of the combination of Agrawal and U.S. Pat. No. 6,366,927 ("Meek"). Applicant's Claims 16-19 were rejected as obvious in view of the combination of Agrawal and U.S. Pat. No. 6,107,961 ("Takagi"). Applicant's Claims 20, 22, 24 and 26-27 were rejected as obvious in view of the combination of Agrawal and U.S. Pat. No. 6,208,997 ("Sigeti"). Applicant's Claims 21 and 25 were rejected as obvious in view of the combination of Agrawal and Sigeti in further view of U.S. Pat. No. 6,065,007 ("Muthukrishnan").

Applicant respectfully requests the Examiner to reconsider the present application. Applicant submits that all the pending claims in the present application are allowable over the cited references.

Specification

Applicant has amended the Specification to include a SUMMARY OF THE INVENTION section as requested by the Office action.

Claim Rejections – 35 U.S.C. §102

Independent Claim 1

Applicant's independent Claim 1 relates to a method of representing cartographic data in a cartographic database. The recited method comprises "computing wavelet and scaling coefficients corresponding to at least one function representing a geographic feature in the cartographic database." The "coefficients being useable for representing cartographic data." Agrawal does not anticipate Applicant's independent Claim 1 because Agrawal fails to disclose or suggest every claim element of Claim 1.

Agrawal discloses a method for a multimedia database, such as a high dimensional image database containing 1 million objects with each object having approximately 100 features forming a feature vector. (*See*, Agrawal: column 2, lines 38-41). Agrawal's method

defines a set of features that describes the contents of the objects within the database to be searched. The method then applies a set of feature extraction functions having a similarity measure for each of the stored objects in the database. (*See*, Agrawal: column 6, lines 8-16). After defining and applying the feature extraction functions to the objects, the Agrawal method transforms the feature vectors in a manner such that the similarity measure is preserved and such that the information of the feature vectors is concentrated in only a few coefficients and minimized in other coefficients. (*See*, Agrawal: column 7, lines 25-31). The transforms may be Discrete Fourier Transforms or Wavelet Transforms. (*See*, Agrawal: column 7, lines 49-53). The coefficients that contribute little information are truncated. With the truncated feature vectors and their coefficients, an index is built using a point of access method. (*See*, Agrawal: column 8, line 66 – column 9, line 5).

Agrawal fails to disclose or suggest the claim element of computing wavelet and scaling coefficients corresponding to a function representing a geographic feature, the coefficients being useable for representing cartographic data. First, Agrawal completely fails to disclose geographic features and cartographic data. Additionally, although Agrawal discloses performing wavelet transforms, the coefficients of Agrawal are not useable for representing cartographic data in the database. Rather, the coefficients are merely useable for developing an index for the database. (*See*, Agrawal: column 7, lines 49-53; column 8, line 66 – column 9, line 5).

Because Agrawal fails to disclose or suggest every claim element, Agrawal does not anticipate Applicants' independent Claim 1.

Independent Claim 13

Applicant's independent Claim 13 relates to a method of generating a computer-usable database. The recited method comprises "computing a plurality of wavelet and scaling coefficients from the data points, wherein said wavelet and scaling coefficients are used to represent the cartographic data." Agrawal does not anticipate Applicant's independent Claim 13 because Agrawal fails to disclose or suggest every claim element of Claim 1. For similar reasons as described above in conjunction with Claim 1, Agrawal fails to disclose or suggest computing a plurality of wavelet and scaling coefficients from the data points, wherein said

wavelet and scaling coefficients are used to represent the cartographic data. Because Agrawal fails to disclose or suggest every claim element, Agrawal does not anticipate Applicants' independent Claim 13.

Claim Rejections – 35 U.S.C. §103

Independent Claim 8 and 11

Applicant's independent Claims 8 and 11 were rejected as be obvious in view of Agrawal and Meek. Applicant respectfully requests the Examiner to withdraw this rejection because the Meek patent is not available as prior art to the present application for purposes of 35 U.S.C. §103.

The American Inventors Protection Act of 1999 amended 35 U.S.C. § 103 so that subject matter which is prior art under 35 U.S.C. § 103 via § 102(e) is now disqualified as prior art against a claimed invention if that subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. The USPTO rules implementing this change in 35 U.S.C. § 103 state that:

> The amendment of 103(c) "... shall apply to any application for patent filed on or after the date of enactment of this Act," which is November 29, 1999. Therefore, amended 103(c) will be applied to all utility, design and plant patent applications filed on or after November 29, 1999, including continuing applications filed under 37 CFR 1.53(b), continued prosecution applications filed under 37 CFR 1.53(d) and reissues.
> (See, http://www.uspto.gov/web/offices/com/sol/og/2000/week15/patamin.htm)

Applicant respectfully points out that the Meek patent and the present application are commonly owned. Therefore, due to the amendment of 35 U.S.C. § 103(c), the Meek patent is not available as prior art against the claims of the present application. Accordingly, Applicant requests that the rejection of independent Claims 8 and 11 under 35 U.S.C. § 103 be withdrawn.

Moreover, the Applicant would like to point out that Agrawal fails to disclose or suggest every claim element of independent Claims 8 and 11. Applicant's independent Claim 8 relates to a method of displaying on a computer output device a function representing a

geographic feature. The recited method comprises "retrieving from a computer-usable database a plurality of wavelet and scaling coefficients associated with the geographic feature, the coefficients being derived from a plurality of data points specifying geographic locations." The method also comprises "computing the function representing the geographic feature using the retrieved wavelet and scaling coefficients and displaying the function on the computer output device." Applicant's independent Claim 11 relates to a system for displaying on a computer output device a representation of a geographic feature. The recited system comprises "a database storing a plurality of wavelet and scaling coefficients associated with the geographic feature, the wavelet and scaling coefficients being derived from a plurality of data points specifying geographic locations." The system also comprises "a processor to calculate a function using the wavelet and scaling coefficients, the function representing the geographic feature and a display device for displaying the function."

Agrawal fails to disclose or suggest a plurality of wavelet and scaling coefficients associated with the geographic feature, the coefficients being derived from a plurality of data points specifying geographic locations from the data points. Additionally, Agrawal also fails to disclose computing or calculating the function representing the geographic feature using the wavelet and scaling coefficients. Although, Agrawal discloses performing wavelet transforms, the coefficients are not associated with the geographic feature in the database and are not used to compute the function representing the geographic feature. Rather the coefficients in Agrawal are used for indexing features within the database. (*See*, Agrawal: column 7, lines 49-53; column 8, line 66 – column 9, line 5).

For these reasons, Applicant's independent Claims 8 and 11 are not obvious in view of the combination of Agrawal and Meek.

Independent Claim 16

Applicant's independent Claim 16 relates to a system for generating a computer-usable database. The recited system comprises "a processor to compute a plurality of wavelet and scaling coefficients from the data points, wherein said wavelet and scaling coefficients are used to represent the cartographic data." Applicants independent Claim 16 is not obvious

in view of the combination of Agrawal and Takagi because the references fail to disclose or suggest every claim element of Claim 16.

For similar reasons as described above in conjunction with Claim 1, Agrawal fails to disclose or suggest a processor configured to compute a plurality of wavelet and scaling coefficients from the data points, wherein said wavelet and scaling coefficients are used to represent the cartographic data. Although Agrawal discloses performing wavelet transforms, Agrawal does not compute wavelet and scaling coefficients from data points, and the coefficients of Agrawal are not useable for representing cartographic data. Rather, the coefficients are merely useable for developing an index for the database. (*See*, Agrawal: column 7, lines 49-53; column 8, line 66 – column 9, line 5).

Takagi also fails to disclose or suggest a processor configured to compute a plurality of wavelet and scaling coefficients from the data points, wherein said wavelet and scaling coefficients are used to represent the cartographic data. Takagi has no disclosure relating to wavelet and scaling coefficients.

Because the combination of Agrawal and Takagi fails to disclose or suggest every claim element, independent Claim 16 is not obvious in view of the combination of Agrawal and Takagi.

Independent Claim 20

Applicant's independent Claim 20 relates to a method for generating a database error metric. The recited method comprises "computing a first plurality of wavelet and scaling coefficients" from a plurality of data points in a first cartographic database and "computing a second plurality of wavelet and scaling coefficients" from a plurality of data points in a second cartographic database, "wherein said wavelet and scaling coefficients represent geographic features." The method further recites "generating the database error metric based on a wavelet transform involving the first and second pluralities of wavelet coefficients." Applicant's independent Claim 20 is not obvious in view of the combination of Agrawal and Sigeti because the references fail to disclose or suggest every claim element of Claim 20.

For similar reasons as described above in conjunction with Claim 1, Agrawal fails to disclose or suggest computing a plurality of wavelet and scaling coefficients from the data

points, wherein said wavelet and scaling coefficients represent geographic features. Although Agrawal discloses performing wavelet transforms, Agrawal does not compute wavelet and scaling coefficients from data points, and the coefficients of Agrawal are not useable for representing geographic features. Rather, the coefficients are merely useable for developing an index for the database. (*See*, Agrawal: column 7, lines 49-53; column 8, line 66 – column 9, line 5).

Sigeti also fails to disclose or suggest computing a plurality of wavelet and scaling coefficients from the data points, wherein said wavelet and scaling coefficients represent geographic features. Sigeti has no disclosure relating to wavelet and scaling coefficients.

Because the combination of Agrawal and Sigeti fails to disclose or suggest every claim element, independent Claim 20 is not obvious in view of the combination of Agrawal and Sigeti.

Independent Claim 24

Applicant's independent Claim 24 relates to a system for generating a database error metric. The recited system comprises a processor "configured to compute a first plurality of wavelet and scaling coefficients and a second plurality of wavelet and scaling coefficients" from a plurality of data points in a first and second cartographic database, "wherein said wavelet and scaling coefficients represent geographic features." The method further recites the processor "generating the database error metric based on the first and second pluralities of wavelet and scaling coefficients." Applicant's independent Claim 24 is not obvious in view of the combination of Agrawal and Sigeti because the references fail to disclose or suggest every claim element of Claim 24.

For similar reasons as described above in conjunction with Claim 20, Agrawal fails to disclose or suggest computing a plurality of wavelet and scaling coefficients from the data points, wherein said wavelet and scaling coefficients represent geographic features. Although Agrawal discloses performing wavelet transforms, Agrawal does not compute wavelet and scaling coefficients from data points, and the coefficients of Agrawal are not useable for representing geographic features. Rather, the coefficients are merely useable for developing

an index for the database. (*See*, Agrawal: column 7, lines 49-53; column 8, line 66 – column 9, line 5).

Sigeti also fails to disclose or suggest computing a plurality of wavelet and scaling coefficients from the data points, wherein said wavelet and scaling coefficients represent geographic features. Sigeti has no disclosure relating to wavelet and scaling coefficients.

Because the combination of Agrawal and Sigeti fails to disclose or suggest every claim element, independent Claim 24 is not obvious in view of the combination of Agrawal and Sigeti.

Applicant's dependent Claims 2-7, 9-10, 12, 14-15, 17-19, 21-23 and 25-27

Applicant's Claims 2-7, 9-10, 12, 14-15, 17-19, 21-23 and 25-27 are dependent claims that distinguish the cited references at least for the same reasons explained above in connection with their independent base claims. In addition, these claims recite further features and limitations that are neither disclosed nor suggested by these references.

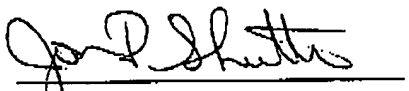
Petition for extension of time

Included with this response is a request for an extension of time to reply to the Office Action dated December 4, 2002. Included with this response is an authorization for payment of the fee associated with this request.

Conclusion

All the issues in the Office Action, dated December 4, 2002 have been addressed. Favorable consideration of the present application is requested. If any issues remain, the Examiner is invited to call the undersigned.

Respectfully submitted,



Jon D. Shutter
Reg. No. 41,311
Patent Counsel

NAVIGATION TECHNOLOGIES CORPORATION
222 Merchandise Mart Plaza, Suite 900
Chicago, IL 60654
(312) 894-7000 x7365